Application Serial No. 10/627,592 - Filed: July 25, 2003 Inventor: Peter B. Vander Horn - Attorney Docket No.: 020130-001420US Sheet 13 of 24 - 2nd Replacement Sheet



Figure 8.

14

atg atc ctg gat g(t/c)t gac tac atc act gaa ga(a/c) ggc aaa ccg (g/a)tt atc cgt (c/a)t(g/c) ttc L/I/M D Y I T E E/D ĸ V/T aaa aaa gag aac ggc (a/g)aa ttt aag (a/g)tt gag (c/t)at gat cgc a(a/c)c ttt cgt cca tac att tac gct K I/V E H/Y D R N/T F G K/E F ctg ctg a(g/a)a gat gat tct (a/c)ag att ga(g/t) gaa gtt a(g/a)a aaa atc act g(g/c)t gag cgc cat ggc aag att K/O I E/D E v K/R K I Т G/A Ε 214 215 gtt cgt atc (a/g)tt gat g(t/c)g gaa aag gta (g/a) (g/a)g aag aaa ttt ctg ggc a(a/g)a cca atc (a/g) (a/c)g G/E/R/K K K F L G K/R K/T/E/A I/V V/A Е K gtg tgg a(g/a)a ctg tat (c/t)tc gaa cat cca caa gat gtt ccg a(t/c)t att cgc ga(g/t) aaa (g/a)tt cgc L/F E D v P T/A Ι R E/D gaa cat (c/t)ct gca gtt (g/a)tt gac atc ttc gaa tac gat att cca ttt gca aag cgt tac ctc atc gac aaa F E Y P K R V/I D I D I F Α ggc ctg ata cca atg gag ggc ga(g/t) gaa gaa ctc aag (a/c)tc ctg gcg ttc gat ata gaa acc ctc tat E/D K I/L E G cac gaa ggc gaa gag ttt g(g/c)t aaa ggc cca att ata atg att agc tat gca gat gaa (a/g)a(a/c) gaa gca aag K/N/E/D G/A K G P I I M I S Y D Ε qtg att act tgg aaa aa(a/c) ata gat ctc cca tac gtt gag gtt gta tct tcc gag cgc gag atg att aag cgc E E s R K/N ttt ctc a(g/a)a (g/a)tt atc cgc gag aag gat ccg gac (g/a)tt atc (g/a)tt act tat aac ggc gac tct ttt V/I I V/I gac (c/t)tc cca tat ctg g(t/c)g aaa cgc gca gaa aaa ctc ggt att aaa ctg (a/c)ct (a/c)tc ggc cgt gat ggt T/P I/L G F/L Y L V/A K R A E K L G I K L tee gag eeg aag atg eag egt (a/e)te gge gat atg ace get gta gaa (g/a)tt aag ggt egt ate eat tte gae G R I/L G D М Т Α Ε V/I K ctg tat cat gta att (a/c)(c/g)c cgt act att aac ctc ccg act tac act ctc gag gct gta tat gaa gca att ttt ggt aag ccg aag gag aag gta tac gcc (g/c)at gag att gca (a/g)ag gcg tgg gaa (a/t)cc ggt (a/g)ag D/H E T A K/E T/S K/E (a/g)(a/g)c ctc gag cgt gtt gca aaa tac tcc atg gaa gat gca aag g(t/c)g act tat gaa ctc ggc a(g/a)a gaa ttc V/A T Y E L G N/G/D/S K Y S MEDAK

Application Serial No. 10/627,592 - Filed: July 25, 2003 Inventor: Peter B. Vander Horn - Attorney Docket No.: 020130-001420US Sheet 14 of 24 - 2nd Replacement Sheet

(c/t)tc cca atg gaa (a/g)(t/c)t cag ctc tct cgc ctg gtt ggc caa cca ctg tgg gat gtt tct cgt tct Q L S R L V G Q P L W D V P M E I/T/V/A L/F acc ggt aac ctc gta gag tgg t(t/a)t ctc ctg cgc aaa gcg tac gaa cgc aac gaa (g/c)tg gct ccg aac aag F/Y LLRKAYE Ŕ $\text{cca } (t/g) \, (c/a) \, \text{c gaa } (c/g) \, (g/a) \, \text{a gag tat } (c/g) \, \text{aa cgc cgt ctc cgc gag tct tac } (a/g) \, \text{ct ggt ggc } t \, (t/a) \, \text{t}$ R/O/G/E E Y Q/E R R L R E S gtt aaa gag cca gaa aag ggc ctc tgg gaa (a/g)(a/g)c (a/c)tc gtg t(c/a)c ctc gat ttt cgc (g/t)ct ctg K E P E K G L W E N/S/D/G T / T. V Y/S Τ. D F A/S tat ccg tct att atc att acc cac aac gtg tct ccg gat act ctc aac c(t/g)c gag ggc tgc a(g/a)aPSII I T H N V S P D T L N L/R (a/g)a(a/c) tat gat (g/a)tt gct ccg (c/g)aa gta ggc cac aag ttc tgc aag gac (a/t)tc ccg ggc ttt att V/I P Q/E V G H K F C K D I/F Α ccq tct ctc ctq (a/q)(a/q)q c(a/q)t ctq ctc qa(q/t) gaa cgc caa (a/g)ag att aag (a/c)(g/c)c aaa atg aag K/E I K T/S/P/R P S L L K/R/E/G R/H L L E/D E R O g(a/c)g (a/t)cc (c/a)ag gat ccg att gaa aaa a(t/a)a (a/c)tg ctc gac tat cgc caa a(g/a)a gcg att aaa D P I E K I/K M/L L D Y R Q R/K E/A T/S O/K (a/c)tc ctc gca aac tct t(a/t)t tac ggc tat tat ggc tat gca aaa gca cgc tgg tac tgt aag gag tgt gct F/Y Y G Y Y G Y A K A R W gag tcc gtt act gct tgg ggt cgc (a/g)aa tac atc gag (c/t)tc gtg (t/c)gg aag gag ctc gaa gaa aag ttt ggc K/E Y I E L/F W/R ttt aaa gtt ctc tac att gac act gat ggt ctc tat gcg act att ccg ggt g(g/c)t (a/g)ag (c/t)ct gag D T D G L Y A T I P G G/A 1696 gaa att aag aaa aag get ete gaa ttt gtg aaa tac att aac (g/t)eg aag ete eeg ggt ete etg gag ete gaa F V K(D) Y I N A/S L P E K G L tat gaa ggc ttt tat (g/a)(t/a)g cgc ggc ttc ttc gtt acc aag aag a(g/a)a tat gcg (g/c)tg att gat gaa gaa R/K Y V/L Ι V/E/M/K RGFFVT K K ggc aaa (g/a)tt att act cgt ggt ctc gag att gtg cgc cgt gat tgg agc gaa att gcg aaa gaa act caa gct I T R G L E I V R R D W S E I A K E T V/I a(g/a)a gtt ctc gag (a/g)ct att ctc aaa cac ggc (g/a)ac gtt gaa gaa gct gtg a(g/a)a att gta aaa gaa gta T/A I L K H G D/N VEEAV R/K a(t/c)c (c/g)aa aag ctc (g/t)ct aa(a/c) tat gaa att ccg cca gag aag ctc g(t/c)g att tat gag cag att Y E I K V/A A/S K/N Р act ege eeg etg eat gag tat aag geg att ggt eeg eac gtg get gtt gea aag a(g/a)a etg get get a(g/a)a gge gtg T R P L H E Y K A I G P H V A V A K R/K LAA K/R aaa (g/a)tt a(g/a)a ccg ggt atg gta att ggc tac att gta ctc cgc ggc gat ggt ccg att agc aa(a/c) cgt gca R/K P G M V I G Y I V L R G D G P I

Application Serial No. 10/627,592 - Filed: July 25, 2003
Inventor: Peter B. Vander Horn - Attorney Docket No.: 020130-001420US
Sheet 15 of 24 - 2nd Replacement Sheet

att cta gct gag gaa t(t/a)c gat c(c/t)g a(g/a)a aag cac aag tat gac gca gaa tat tac att gag aac cag gtg I L A E E F/Y D P/L K/R K H K Y D A E Y Y I E N Q V 2272 2273 Ctc ccg gcg gta ctc cgt att ctg gag g(g/c)t ttt ggc tac cgt aag gaa gac ctc cgc t(a/g)(c/g) caa aag L P A V L R I L E G/A F G Y R K E D L R Y/W/*/C Q K act a(g/a)a cag (g/a)(t/c)t ggc ctc act (g/t)ct tgg ctc aac att aaa aaa tcc ggt acc cac tag tgc tag cat gac

 $\text{K/R} \quad \text{Q} \quad \text{V/A/I/T} \quad \text{G} \quad \text{L} \quad \text{T} \quad \text{A/S} \quad \text{W} \quad \text{L} \quad \text{N} \quad \text{I} \quad \text{K} \quad \text{K} \quad \text{S} \quad \text{G} \quad \text{T} \quad \text{H} \quad \star$